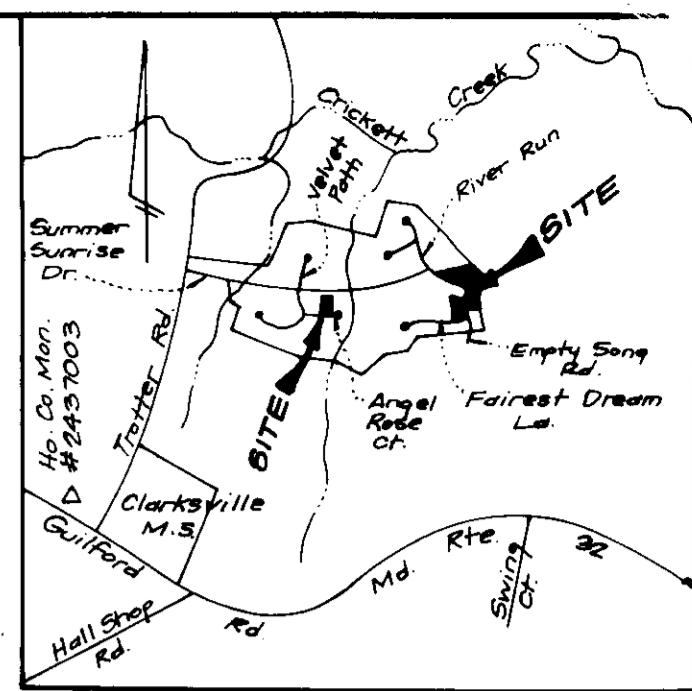
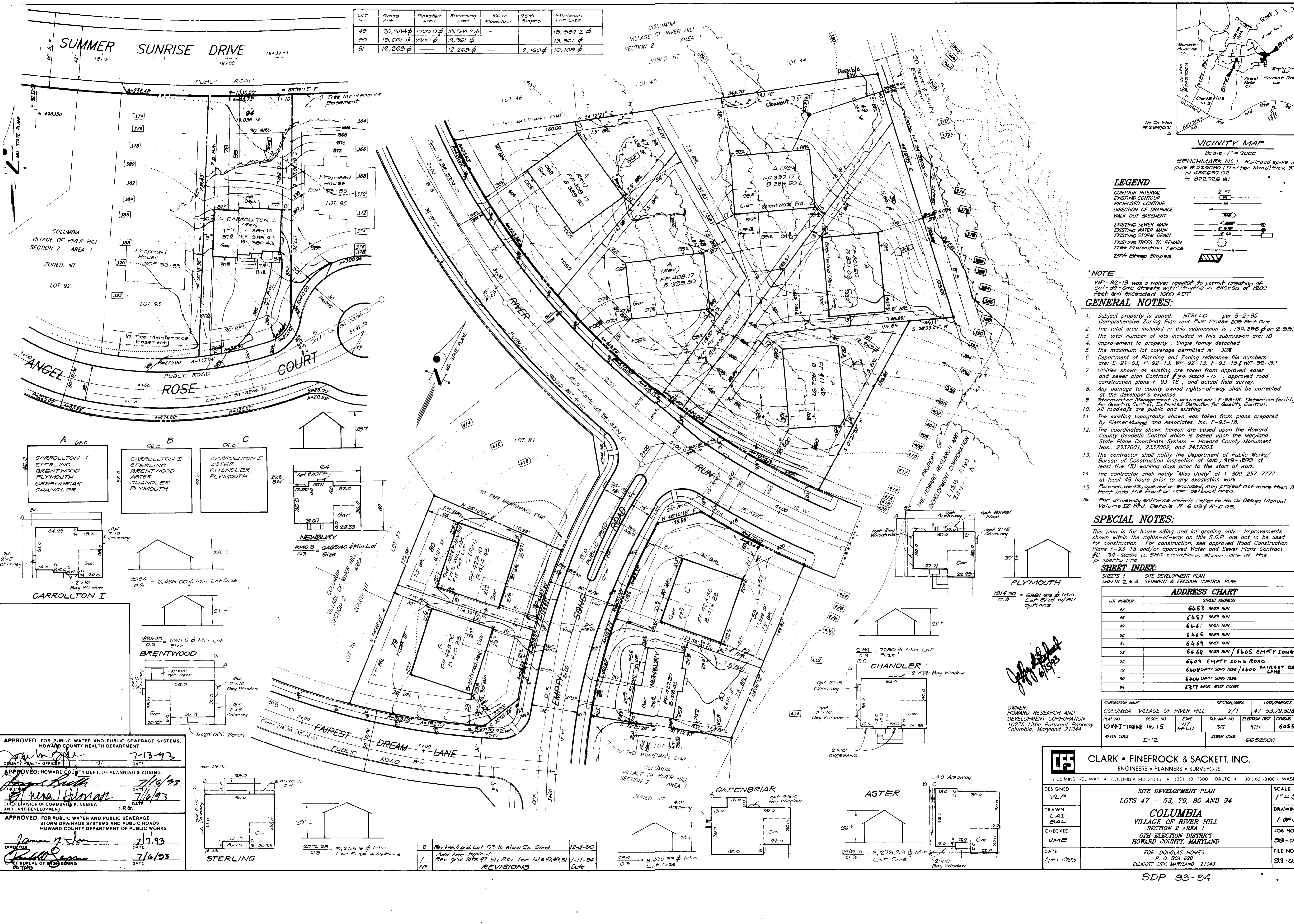


LOT No	Gross Area	Open Area	Remaining Area	100 ft Floodplain	25% Slopes	Minimum Lot Size
49	20,384 sq ft	17,939 sq ft	18,594.2 sq ft			18,594.2 sq ft
50	15,661 sq ft	2300 sq ft	13,361 sq ft			13,361 sq ft
51	12,269 sq ft		12,269 sq ft		2,160 sq ft	10,109 sq ft



**LEGEND**

CONTOUR INTERVAL: 2 FT.

EXISTING CONTOUR: Dashed line

PROPOSED CONTOUR: Solid line

DIRECTION OF DRAINAGE: Arrow

WALK OUT BASEMENT: Stippled area

EXISTING SEWER MAIN: Line with 'S'

EXISTING WATER MAIN: Line with 'W'

EXISTING STORM DRAIN: Line with 'SD'

EXISTING TREES TO REMAIN: Circle with 'T'

25% Steep Slopes: Hatched area

**NOTE**

WP-92-13 was a waiver request to permit creation of cut-de-sac streets with lengths in excess of 1200 feet and exceeds of 1000 ADT.

- GENERAL NOTES:**
- Subject property is zoned: NTSPLD per 8-2-85 Comprehensive Zoning Plan and FDP Phase 209 Part One.
  - The total area included in this submission is: 130,398 sq ft or 2.99354.
  - The total number of lots included in this submission are: 10.
  - Improvement to property: Single family detached.
  - The maximum lot coverage permitted is: 30%.
  - Department of Planning and Zoning reference file numbers are: S-91-03, P-92-13, WP-92-13, F-93-18 & WP-92-19.
  - Utilities shown as existing are taken from approved water and sewer plan Contract #34-3204-D, approved road construction plans F-93-18, and actual field survey.
  - Any damage to county owned rights-of-way shall be corrected at the developer's expense.
  - Stormwater Management is provided per: F-93-18, Detention facility for Quantity Control, Extended Detention for Quality Control.
  - All roadways are public and existing.
  - The existing topography shown was taken from plans prepared by Riemer Muegge and Associates, Inc. F-93-18.
  - The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Monument Nos.: 2337001, 2337002, and 2437003.
  - The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (410) 313-1870 at least five (5) working days prior to the start of work.
  - The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
  - Porches, decks, opened or enclosed, may project not more than 3 feet into the front or rear setback area.
  - For driveway entrance details refer to Mo. Co. Design Manual Volume II 5th Ed. Details R-6.03 & R-6.05.

**SPECIAL NOTES:**

This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F-93-18 and/or approved Water and Sewer Plans Contract #C-34-3204-D. 5'4" elevations shown are at the property line.

**SHEET INDEX:**

SHEETS 1 SITE DEVELOPMENT PLAN  
SHEETS 2 & 3 SEDIMENT & EROSION CONTROL PLAN

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
47	6453 RIVER RUN
48	6457 RIVER RUN
49	6461 RIVER RUN
50	6465 RIVER RUN
51	6469 RIVER RUN
52	6468 RIVER RUN / 6605 EMPTY SONG ROAD
53	6609 EMPTY SONG ROAD
79	6608 EMPTY SONG ROAD / 6600 FAIREST DREAM LANE
80	6906 EMPTY SONG ROAD
94	6917 ANGEL ROSE COURT

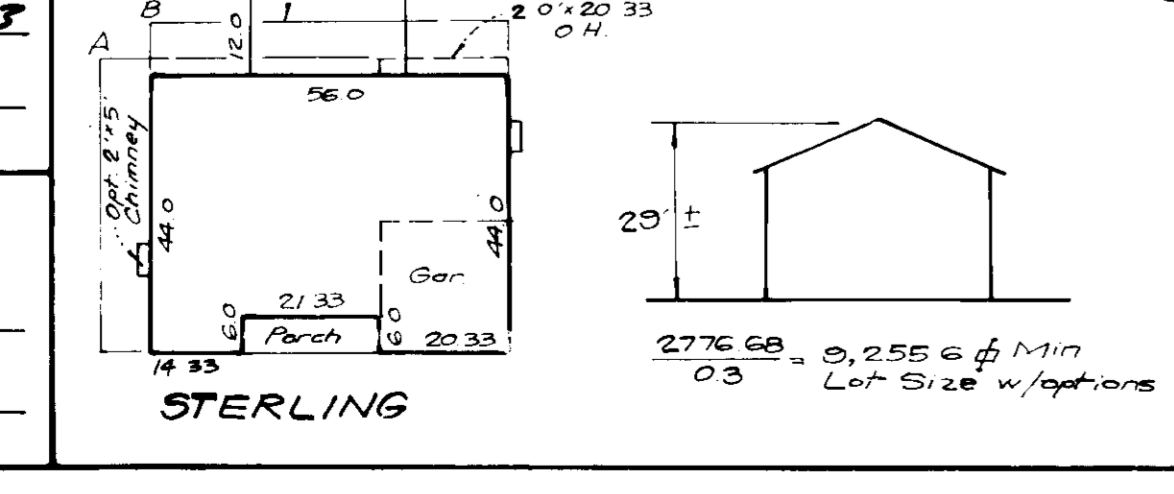
SUBMISSION NAME	SECTION/AREA	LOTS/PARCELS
COLUMBIA VILLAGE OF RIVER HILL	2/1	47-53, 79, 80 & 94
PLAT NO.	BLOCK NO.	ZONE
10843-10848	14, 15	SPLD
TAX MAP NO.	ELECTION DIST.	GENESIS TRACT
	35	5TH
WATER CODE	SEWER CODE	
I-12	6652500	

**APPROVED:** FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
DATE: 7-13-93

**APPROVED:** HOWARD COUNTY DEPT. OF PLANNING & ZONING  
DATE: 7/16/93

**APPROVED:** FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
DATE: 7/17/93

**APPROVED:** FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
DATE: 7/16/93



- REVISIONS**
- | No  | Revise & add Lot 53 to show Ex. Cond. Add hse typical. Rev. grd lots 47-51, Rev. hse lots 47, 49, 51 | Date    |
|-----|--|---------|
| 2   | Rev hse & add Lot 53 to show Ex. Cond.   | 12-4-95 |
| 1   | Add hse typical. Rev. grd lots 47-51, Rev. hse lots 47, 49, 51                                       | 1-11-94 |
| N/A |  |         |

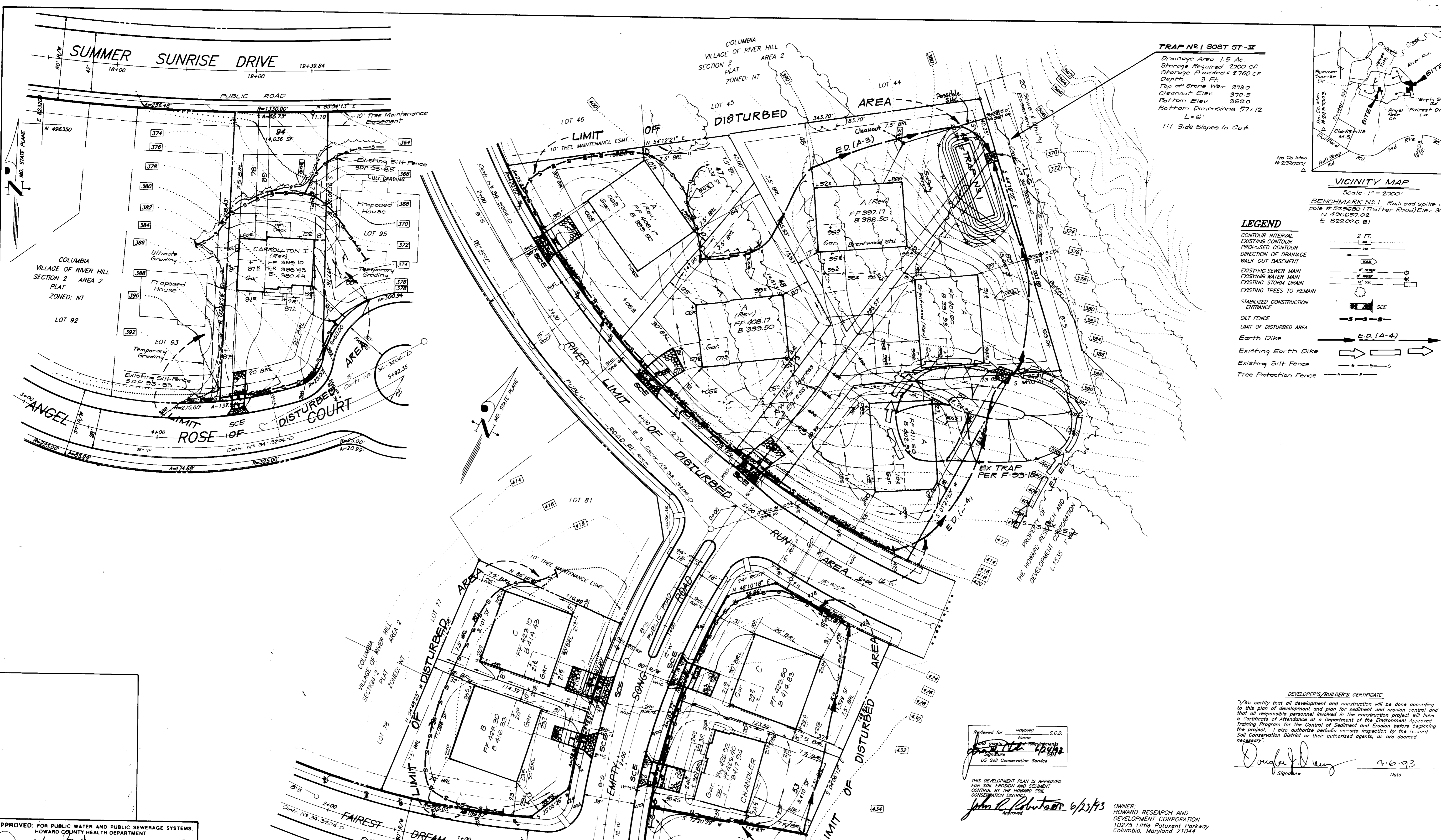
**CLARK • FINEPROCK & SACKETT, INC.**  
ENGINEERS • PLANNERS • SURVEYORS

7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 881-7500 • BALTO • (301) 621-8100 • WASH

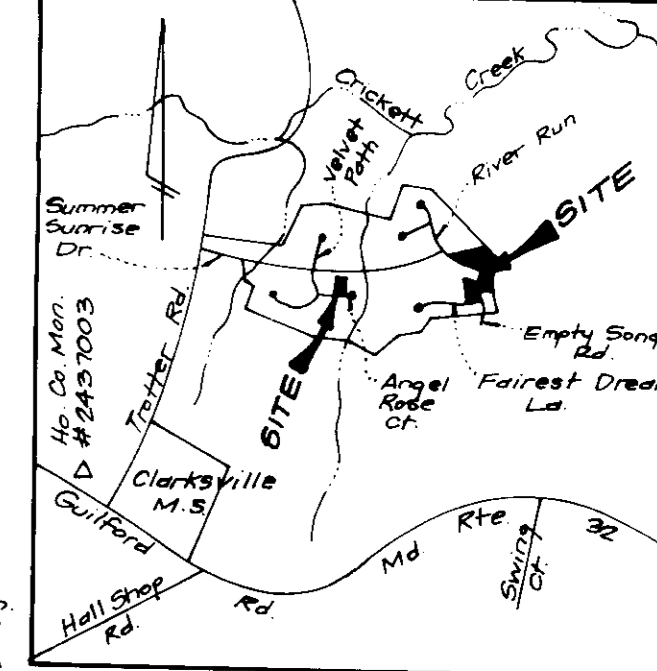
DESIGNED	VLP	SITE DEVELOPMENT PLAN	SCALE
DRAWN	LAI	LOTS 47 - 53, 79, 80 AND 94	1" = 30'
CHECKED	UME	COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 1	DRAWING
DATE	Apr. 1, 1993	5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	1 OF 3
		FOR: DOUGLAS HOMES P. O. BOX 628 ELLICOTT CITY, MARYLAND 21043	JOB NO.
			93-053
			FILE NO.
			93-053A

SDP 93-94





**TRAP NO. 1 BOST ST-1**  
 Drainage Area 1.5 Ac.  
 Storage Required 2700 CF  
 Storage Provided = 2700 CF  
 Depth 3 Ft.  
 Top of Stone Weir 373.0  
 Cleanup Elev. 370.5  
 Bottom Elev. 369.0  
 Bottom Dimensions 57' x 12'  
 L x G'  
 1:1 Side Slopes in Cut



- LEGEND**
- CONTOUR INTERVAL 2 FT.
  - EXISTING CONTOUR
  - PROPOSED CONTOUR
  - DIRECTION OF DRAINAGE
  - WALK OUT BASEMENT
  - EXISTING SEWER MAIN
  - EXISTING WATER MAIN
  - EXISTING STORM DRAIN
  - EXISTING TREES TO REMAIN
  - STABILIZED CONSTRUCTION ENTRANCE SCE
  - SILT FENCE
  - LIMIT OF DISTURBED AREA
  - Earth Dike
  - Existing Earth Dike
  - Existing Silt Fence
  - Tree Protection Fence

**APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,**  
 HOWARD COUNTY HEALTH DEPARTMENT  
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 7-13-93

**APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING**  
 DIRECTOR: *[Signature]* DATE: 7/16/93  
 CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

**APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,**  
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DIRECTOR: *[Signature]* DATE: 7/17/93  
 CHIEF BUREAU OF ENGINEERING

1 Rev 9rd. lots 47-51, Rev 1st. lots 47, 48 & 51 1-11-94  
 NS REVISIONS Date

Reviewed for HOWARD S.C.D.  
 and made the necessary adjustments  
*[Signature]*  
 US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED  
 FOR SOIL EROSION AND SEDIMENT  
 CONTROL BY THE HOWARD SOIL  
 CONSERVATION DISTRICT.  
*[Signature]* 6/23/93  
 Approved

**DEVELOPER'S/BUILDER'S CERTIFICATE**  
 "I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."  
*[Signature]* 4-6-93  
 Signature Date

OWNER:  
 HOWARD RESEARCH AND  
 DEVELOPMENT CORPORATION  
 10275 Little Patuxent Parkway  
 Columbia, Maryland 21044

**ENGINEER'S CERTIFICATE**  
 I hereby certify that this plan for Sediment and Erosion Control represents a practical and verifiable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
*[Signature]* 4/7/93  
 Signature Date

<b>CLARK • FINEROCK &amp; SACKETT, INC.</b> ENGINEERS • PLANNERS • SURVEYORS		
7195 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 301-7500 BALTO. • (301) 621-8100 - WASH.		
DESIGNED KIWM	<b>SEDIMENT &amp; EROSION CONTROL PLAN</b> LOTS 47 - 53, 79, 80 AND 94	SCALE 1" = 30'
DRAWN BAL		DRAWING 20-3
CHECKED KIWM	COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 1 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 93-053
DATE Apr. 1 1993		FOR: DOUGLAS HOMES P. O. BOX 628 ELLICOTT CITY, MARYLAND 21043 FILE NO. 93-053

SDP 93-94



**SEDIMENT AND EROSION CONTROL NOTES**

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (895-1810).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec.51) sod (Sec.54), temporary seeding (Sec.50) and mulching (Sec.52). Temporary stabilization with mulch alone can only be done when recommended seeding rates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- SITE ANALYSIS:**

Total Area of Site:	7.99AC
Area to be roofed or paved:	2.77AC
Area to be vegetatively stabilized:	1.02AC
Total Cut:	38.00 CY
Total Fill:	13,110 CY
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- If houses are to be constructed on an "as sold" basis, at random, Single Family Sediment Control, as shown below shall be implemented.
- All pipes to be blocked at the end of each day (see detail this sheet).
- The total amount of silt fence = 1195 LF

\* it is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.

**PERMANENT SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

**SEEDBED PREPARATION:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

**SOIL AMENDMENTS:** In lieu of soil test recommendations, use one of the following schedules:  
 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq ft.) and 800 lbs per acre 10-10-10 fertilizer (14 lbs./1000 sq ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 3-0-0 ureaform fertilizer (9 lbs./1000 sq ft.)

2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq ft.) before seeding. Harrow or disc into upper three inches of soil.

**SEEDING:** For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60lbs per acre (1.4 lbs./1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs./1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs./acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

**MULCHING:** Apply 1 1/2 to 2 tons per acre (20 to 30 lbs./1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

**MAINTENANCE:** Inspect all seeded areas and make needed repairs, replacements and reseedings.

**TEMPORARY SEEDING NOTES**

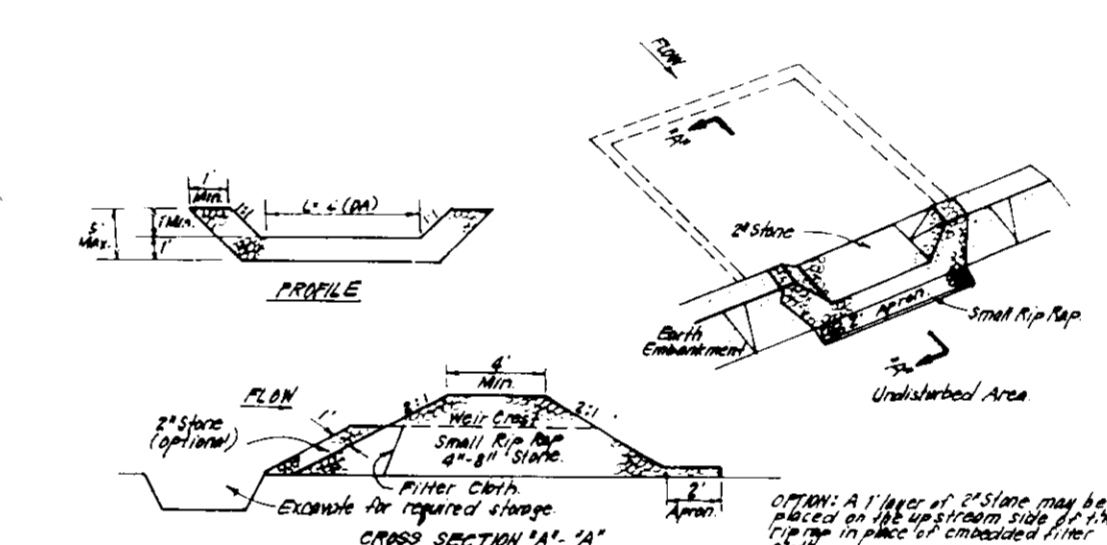
**SEEDBED PREPARATION:** Loosen upper three inches of soil by raking, discing, or other acceptable means before seeding, if not previously loosened.

**SOIL AMENDMENTS:** Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs./1000 sq ft).

**SEEDING:** For periods March 1 thru April 30 and from August 15 thru November 15, seed with 1/2 bushel per acre of annual ryegrass (3.2 lbs./1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs./1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

**MULCHING:** Apply 1 1/2 to 2 tons per acre (20 to 30 lbs./1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

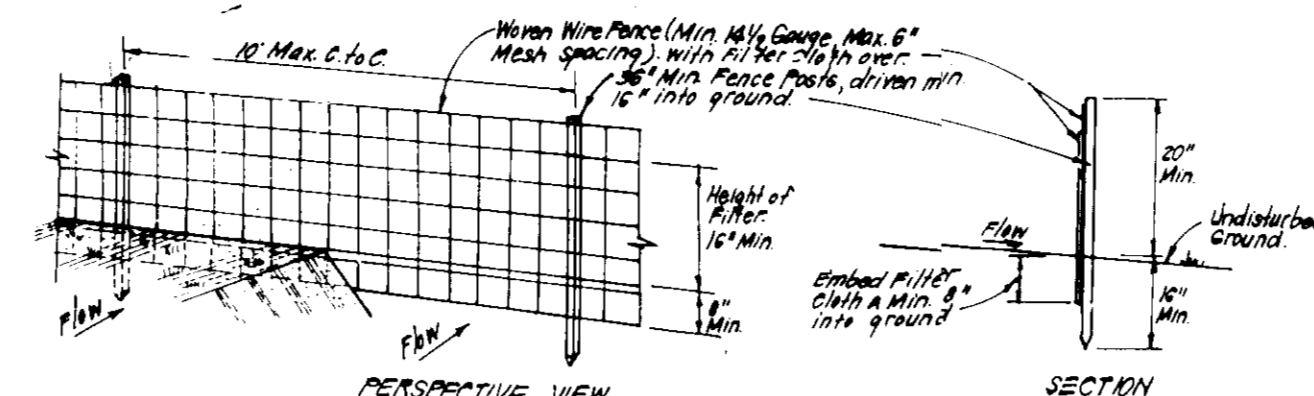
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



**CONSTRUCTION SPECIFICATIONS:**

- Any water embankment shall be cleared, graded and stripped of any vegetation and soil prior to the construction of the structure.
- The fill material for the embankment shall be free of rocks and other hard materials, as well as any other debris, rock, or other material. The embankment shall be compacted by tamping with vibrators or other means.
- The structure shall be constructed with a minimum thickness of 12 inches.
- The stone used in the outlet shall be small in size and shall be placed in a thickness of 24 inches placed on the stone used in the embankment. The stone shall be placed in a thickness of 24 inches placed on the stone used in the embankment.
- Small stones shall be removed and any material in its original dimensions shall be removed and replaced with 18 inch diameter stone in each direction until the embankment is stabilized.
- The structure shall be inspected after each rain and repairs made as needed.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

**STONE OUTLET SEDIMENT TRAP (S.O.S.T.) S.V.**



**RESPECTIVE VIEW**

**CONSTRUCTION SPECIFICATIONS:**

- Woven wire fence to be fastened securely to fence posts with wire ties or staples.
- Filter cloth to be fastened securely to woven wire fence with 1/2 inch spaced every 24 inches at top and bottom.
- When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and stapled.
- Maintenance shall be performed as needed and material removed when "bulges" develop in Silt Fence.

**POSTS:** Steel either Terol Type or 2" diameter wood.

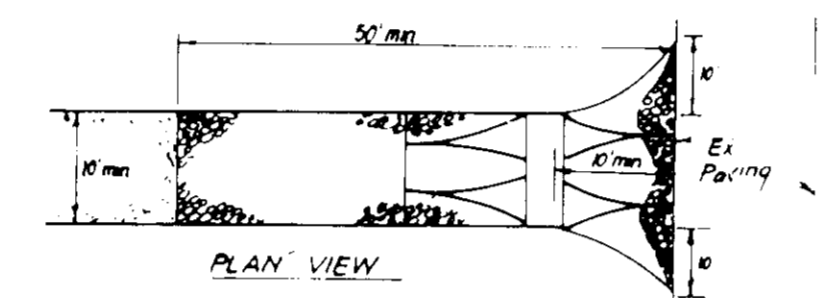
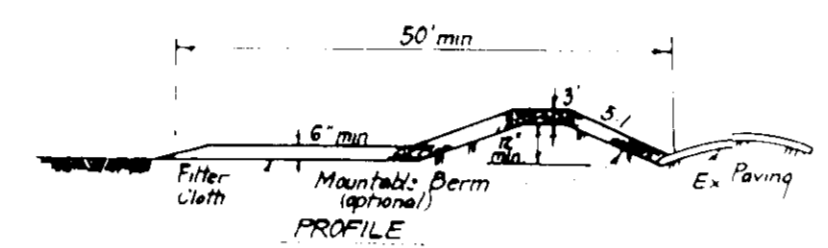
**FENCE:** Woven wire, 1/4" gauge.

**FILTER CLOTH:** Filter Cloth, 1/2" mesh.

**STONE:** 1/2" to 1" size, 100% approved.

**PREPARED UNIT:** Geotex, Envirofence, or approved equal.

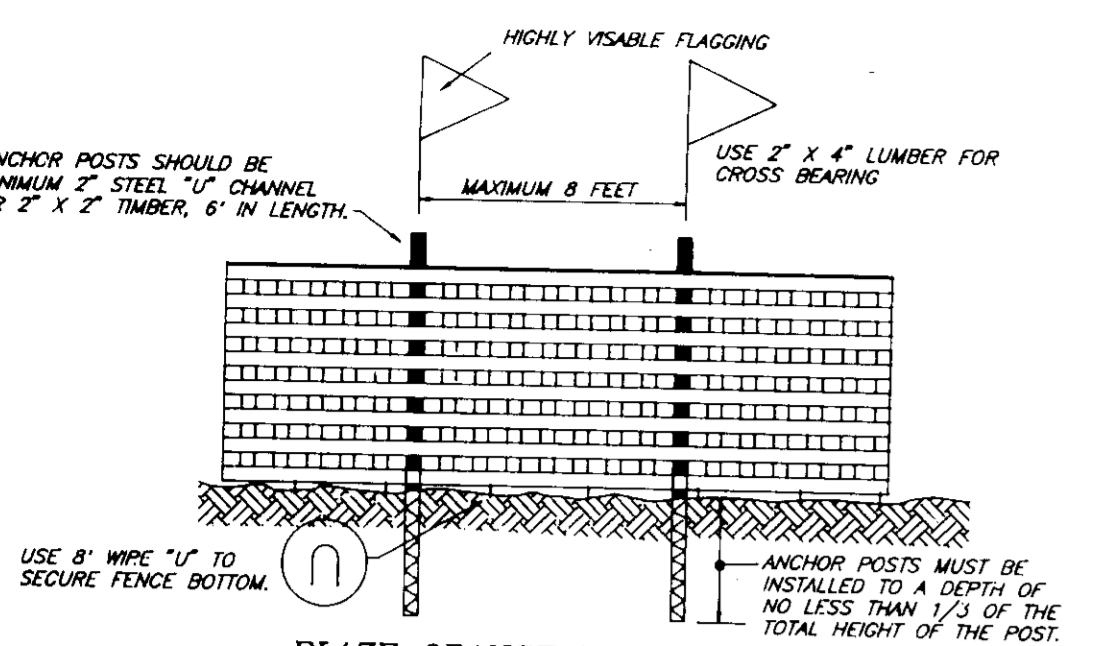
**SILT FENCE DETAIL (S)**



**CONSTRUCTION SPECIFICATIONS:**

- Stone size - Use 2" stone or reclaimed or recycled concrete equipment.
- Length - As required, but not less than 50 feet, except on a single residence lot where a 30 foot minimum length would apply.
- Thickness - Not less than six (6) inches.
- Width - Ten (10) feet minimum, but not less than the full width at points where ingress or egress occurs.
- Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
- Surface Water - All surface water flowing or diverted toward construction entrance shall be intercepted across the entrance. If ingress or egress is required, a manhole or other structure shall be permitted.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights of way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleaning of any measures used to trap sediment. All sediment trapped, stored, or tracked onto public rights of way must be removed immediately.
- Warning - Wheels shall be cleaned to remove sediment prior to entrance onto public rights of way. When warning is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
- Periodic inspection and needed maintenance shall be provided after each rain.

**STABILIZED CONSTRUCTION ENTRANCE (SCE)**



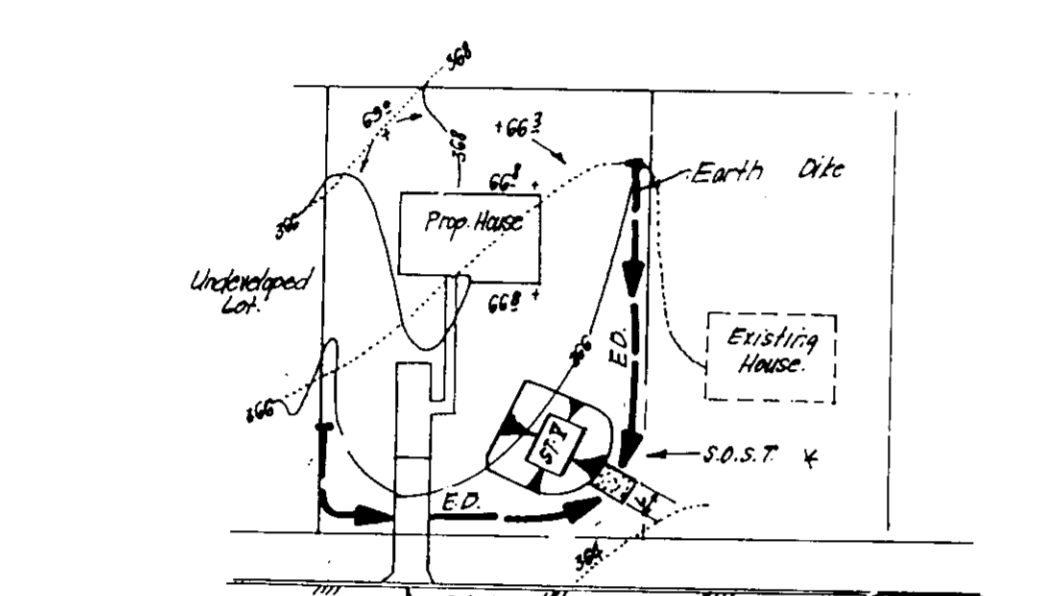
**BLAZE ORANGE PLASTIC MESH TYPICAL TREE PROTECTION FENCE DETAIL**

- NOTES:**
- Forest protection device only.
  - Retention area will be set as part of the review process.
  - Boundaries of retention area should be staked and flagged prior to installing device.
  - Root damage should be avoided.
  - Protection signage may also be used.
  - Device should be maintained throughout construction.

**CONSTRUCTION SPECIFICATIONS:**

- All dikes shall be constructed by earth moving equipment.
- 200 mesh may be used and soil slopes may be steeper if deemed to be suitable by the construction contractor.
- Earth dikes shall have an upper half finished in stabilized earth which shall be compacted to a minimum of 95% relative density. The lower half shall be finished with the same material as the upper half.
- Diaphragm walls shall be: (A) in accordance with standard specifications for soil and stone masonry or (B) in accordance with specifications for concrete masonry.
- Periodic inspection and needed maintenance shall be provided after each rain.

**EARTH DIKE DETAIL (E.D.)**



**\* NOTE:** Single lot detail can not be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing a sediment trap.

NO.	DESCRIPTION	AMOUNT
1	SEDIMENT TRAP	1
2	STABILIZED CONSTRUCTION ENTRANCE	1
3	SILT FENCE	1195 LF
4	BLAZE ORANGE PLASTIC MESH	1195 LF

**SINGLE LOT SEDIMENT CONTROL PLAN**

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
 COUNTY HEALTH OFFICER: [Signature] DATE: 7-13-93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING  
 DIRECTOR: [Signature] DATE: 7/16/93

CHIEF DIVISION OF COMMUNITY PLANNING AND DEVELOPMENT: [Signature] DATE: 7/16/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DIRECTOR: [Signature] DATE: 7/16/93

CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 7/16/93

Approved for: HOWARD S.C.D. Name: [Signature] Date: 6/24/93  
 Signature: [Signature] US Soil Conservation Service

**DEVELOPER'S/BUILDER'S CERTIFICATE**

I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance of a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Signature: [Signature] Date: 4-6-93

**ENGINEER'S CERTIFICATE**

I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature: [Signature] Date: 4/7/93

OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
 10275 Little Patuxent Parkway  
 Columbia, Maryland 21044

**CLARK • FINEFROCK & SACKETT, INC.**  
 ENGINEERS • PLANNERS • SURVEYORS

7135 MINISTREL WAY • COLUMBIA MD 21045 • (301) 981-7500 BALTO • (301) 621-8100 - WASH

DESIGNED KIWM	<b>SEDIMENT &amp; EROSION CONTROL PLAN</b> LOTS 47-53, 75-80 and 84  <b>COLUMBIA</b> VILLAGE OF RIVER HILL SECTION 2 AREA 1 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  FOR: DOUGLAS HOMES, INC. P.O. Box 628 Ellicott City, Md 21043	SCALE 1" = 30'
DRAWN BAL		DRAWING 3 OF 3
CHECKED KIWM		JOB NO 93-053
DATE 4/93		FILE NO 93-053.06
		SDP 93-94